

### **ABSTRACT OF THE DISCLOSURE**

Convective heat traps are installed at the cold water inlet and hot water outlet of a water heater. Each heat trap has a tubular body with two axially spaced apart resilient flapper members transversely extending  
5 across the interior of the body and being hinged on opposite sides thereof. The heat trap at the cold water inlet is coaxially disposed within a dip tube. In one alternate structure, flapper members are mounted directly on the dip tube, and in another alternate structure an external annular seal element is mounted on the dip tube or heat trap body, with a  
10 flapper member being integrally formed with the seal element.